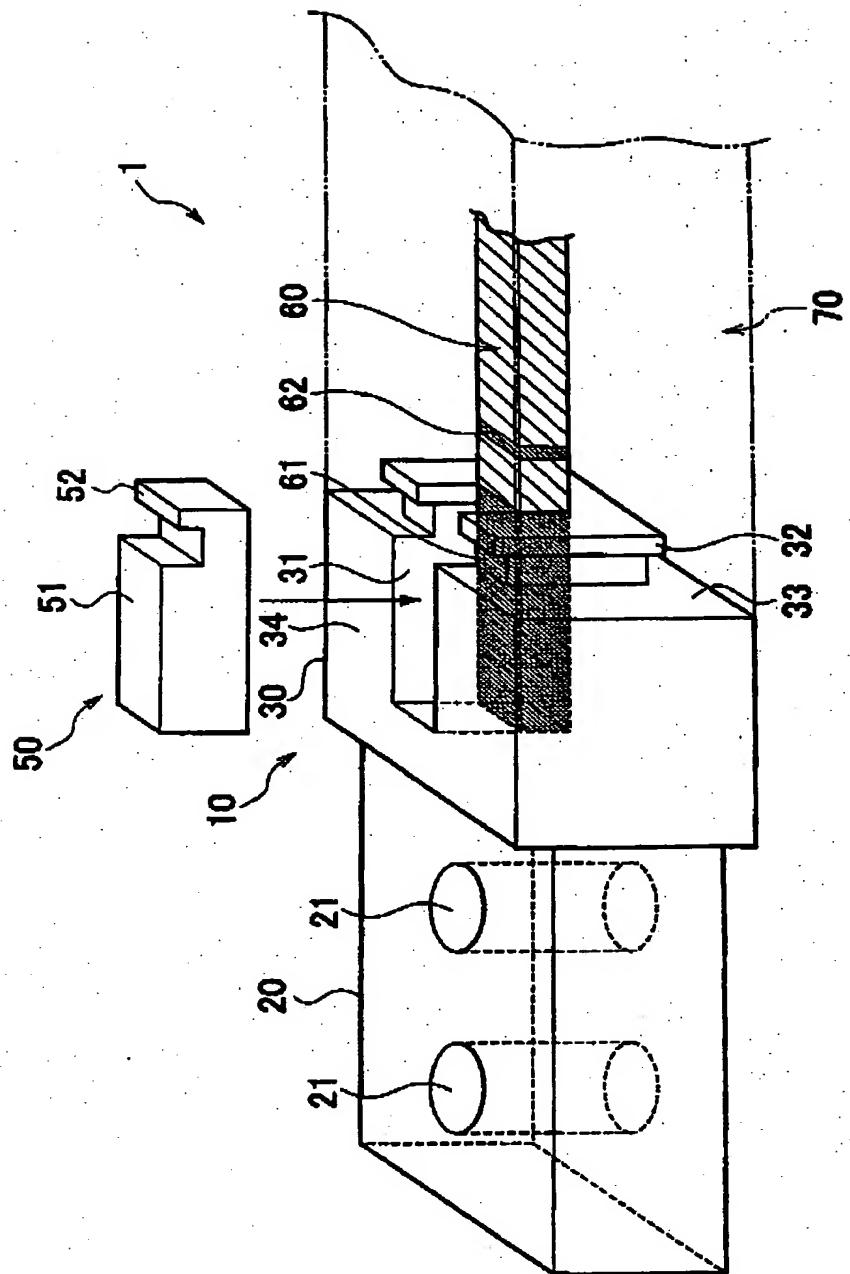


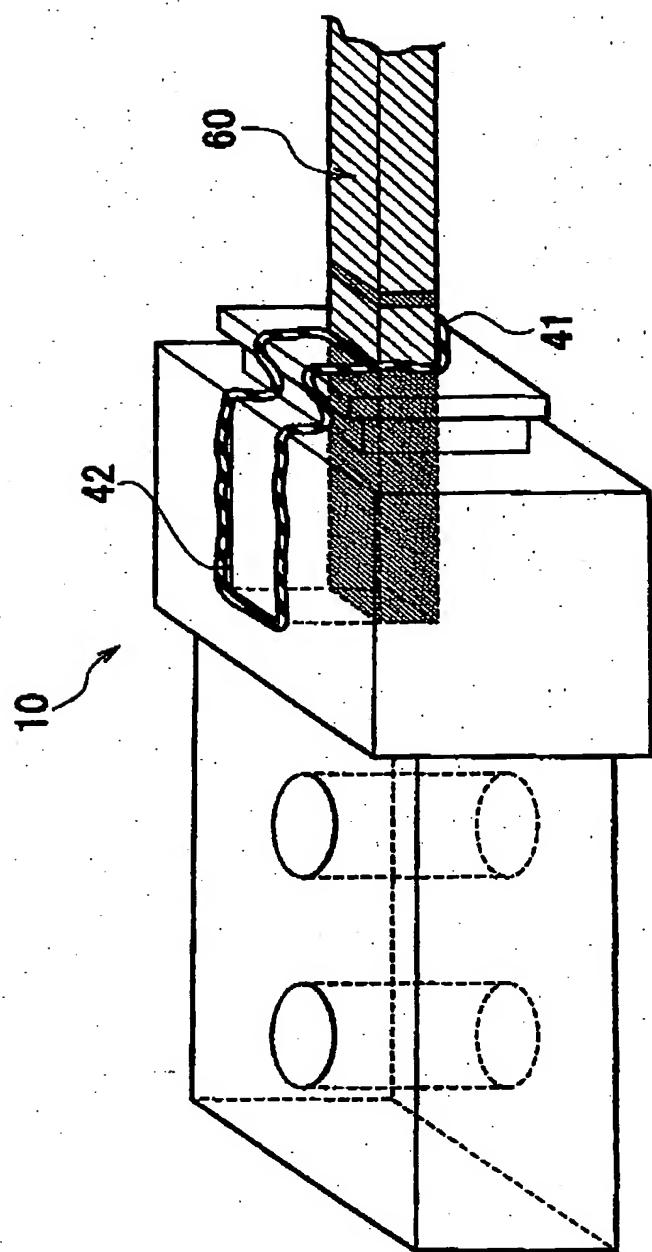
FIG.1



1/16

BEST AVAILABLE COPY

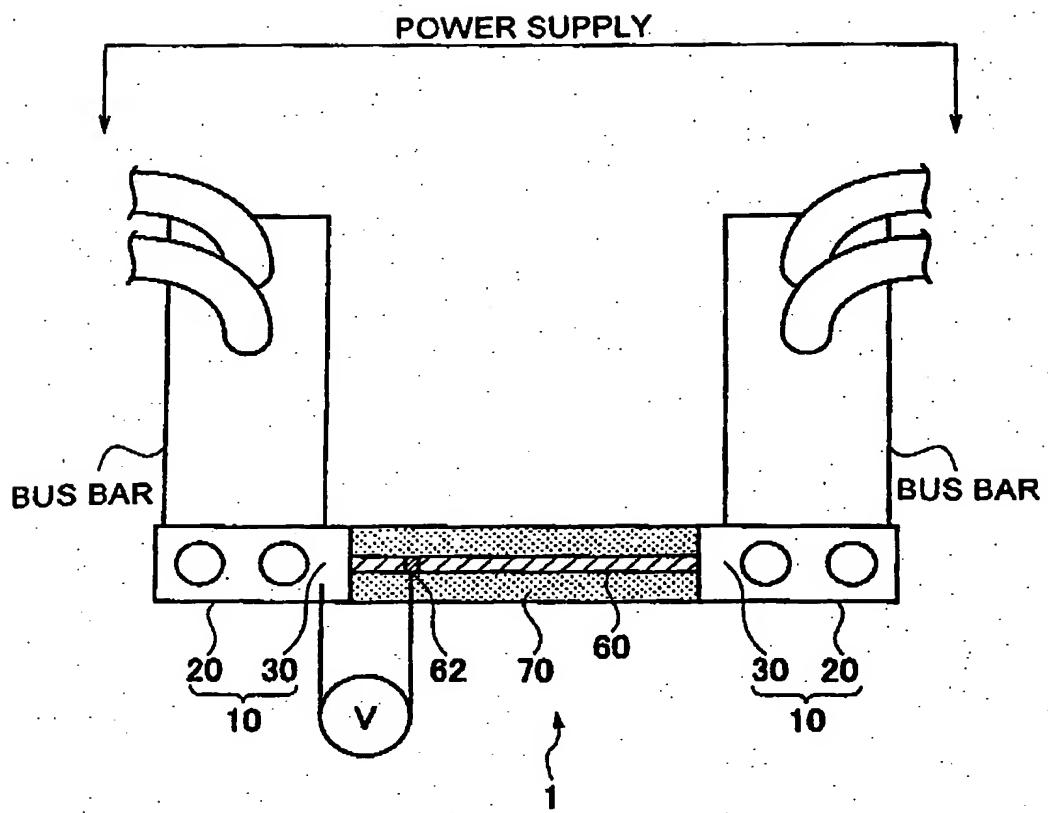
FIG.2



2/16

BEST AVAILABLE COPY

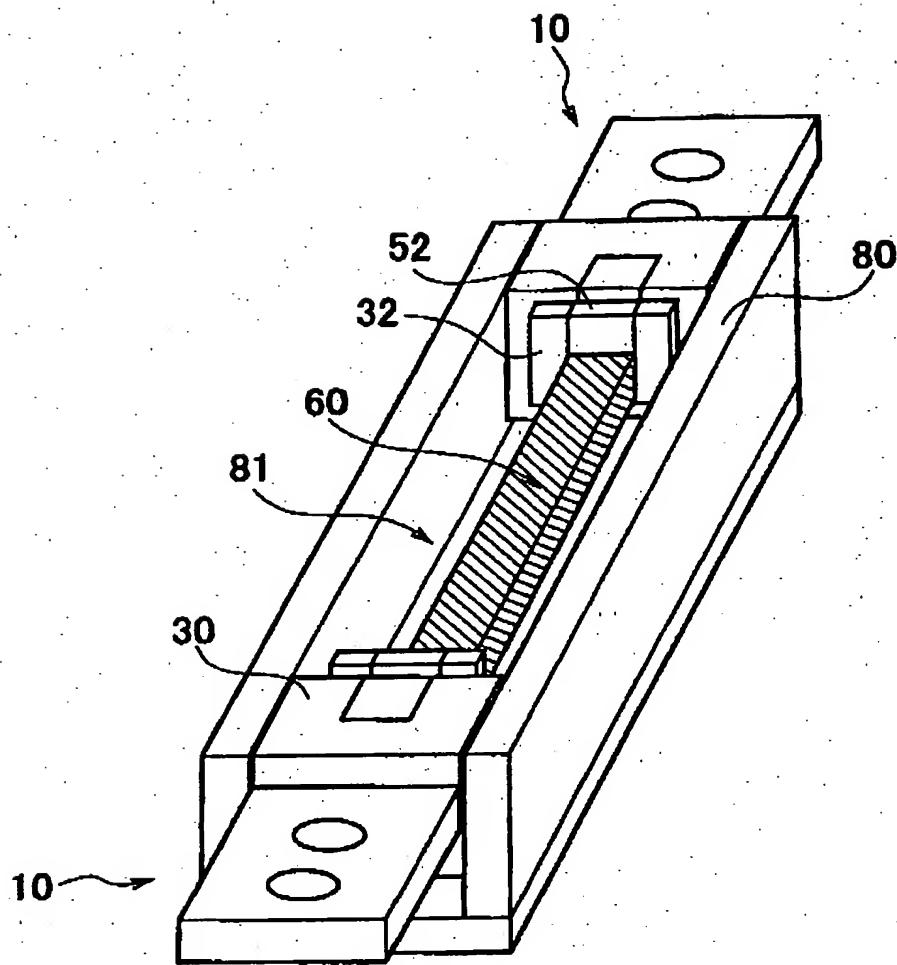
FIG.3



3/16

BEST AVAILABLE COPY

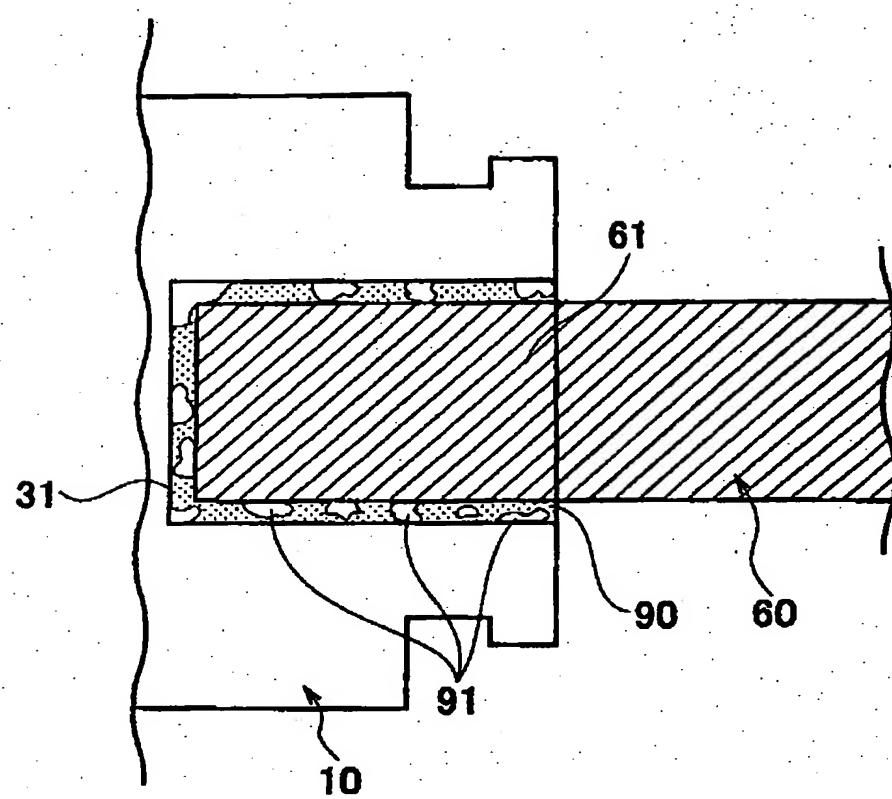
FIG.4



4/16

EXACT AND AVAILABLE COPY

FIG.5



5/16

DECT AMPLIFIED COPY

FIG.6

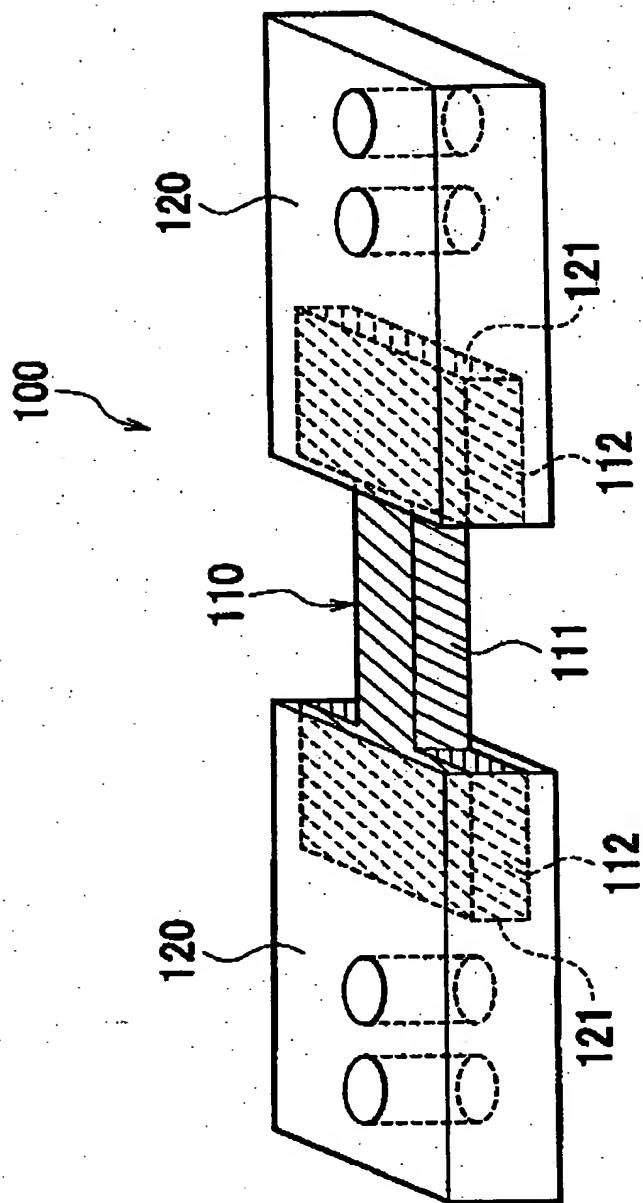


FIG.7

| | | TREATMENT CONDITION | TREATMENT TEMPERATURE | HOLE VOLUME | 77 K CONTACT RESISTANCE VALUE |
|------------|--------------------------------|--|-----------------------|-------------|-------------------------------|
| EXAMPLE 1 | RIGHT | VACUUM DEGASSING + ULTRASONIC | 180°C | 0.07% | 0.18μΩ |
| EXAMPLE 1 | LEFT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.08% | 0.19μΩ |
| EXAMPLE 2 | RIGHT | VACUUM DEGASSING + ULTRASONIC | 180°C | 0.10% | 0.20μΩ |
| EXAMPLE 2 | LEFT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.10% | 0.21μΩ |
| EXAMPLE 3A | RIGHT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.08% | 0.28μΩ |
| EXAMPLE 3A | LEFT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.07% | 0.29μΩ |
| EXAMPLE 3B | RIGHT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.07% | 0.30μΩ |
| EXAMPLE 3B | LEFT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 180°C | 0.08% | 0.29μΩ |
| EXAMPLE 4 | RIGHT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 160°C | 5% | 0.30μΩ |
| EXAMPLE 4 | LEFT | VACUUM DEGASSING + ULTRASONIC IRON TREATMENT | 160°C | 4% | 0.27μΩ |
| COMPARISON | ONLY ULTRASONIC SOLDERING IRON | | | | |
| EXAMPLE 1 | RIGHT | TREATMENT | 160°C | 30% | 0.8μΩ |
| COMPARISON | ONLY ULTRASONIC SOLDERING IRON | | | | |
| EXAMPLE 1 | LEFT | TREATMENT | 160°C | 35% | 0.9μΩ |
| COMPARISON | ONLY ULTRASONIC SOLDERING IRON | | | | |
| EXAMPLE 1 | RIGHT | TREATMENT | 180°C | 50% | 1.2μΩ |
| COMPARISON | ONLY ULTRASONIC SOLDERING IRON | | | | |
| EXAMPLE 1 | LEFT | TREATMENT | 180°C | 45% | 1.1μΩ |

FIG. 8 A

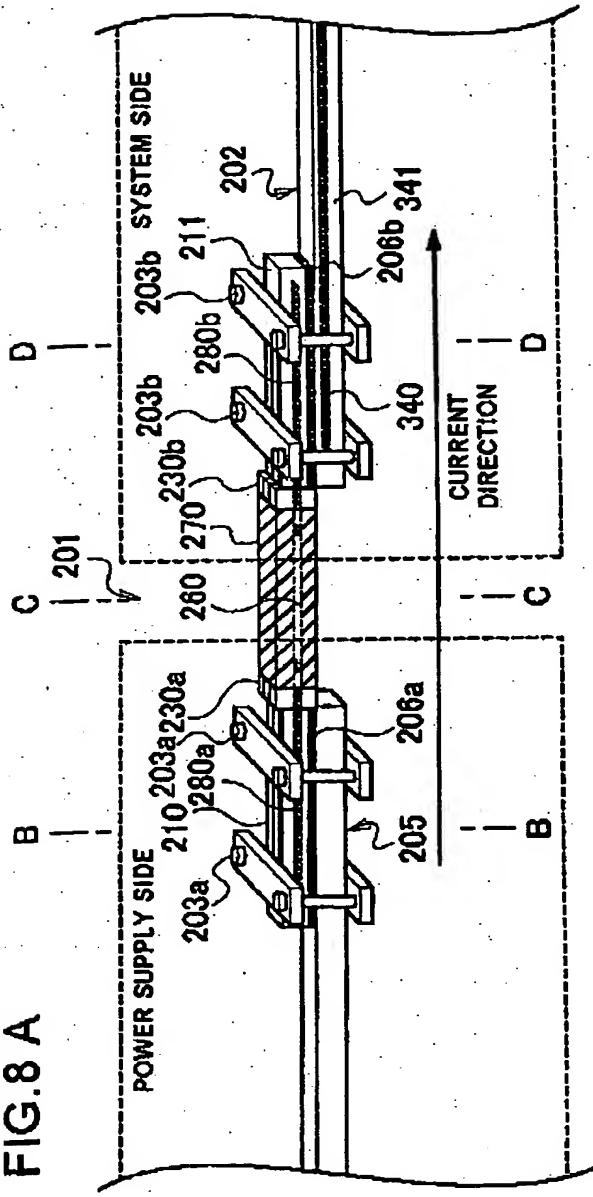


FIG. 8 B
B TO B SECTION

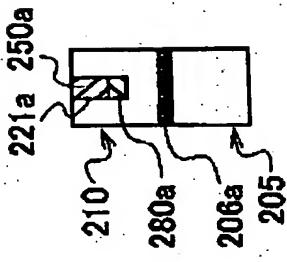


FIG. 8 C
C TO C SECTION

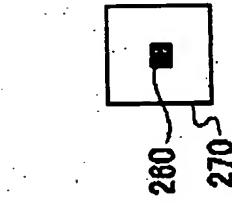


FIG. 8 D
D TO D SECTION

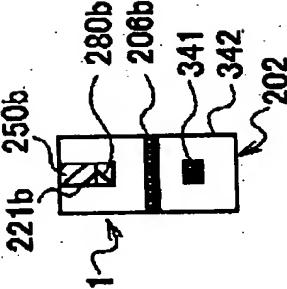


FIG. 9 A

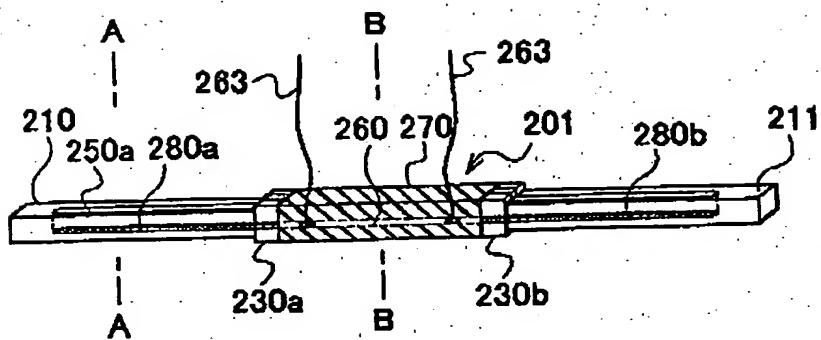


FIG. 9 B
A TO A SECTION

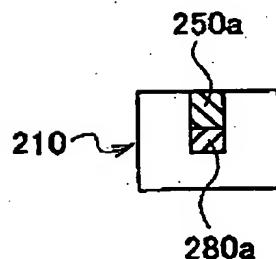


FIG. 9 C
B TO B SECTION

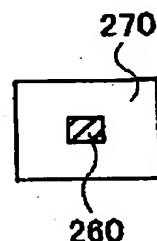
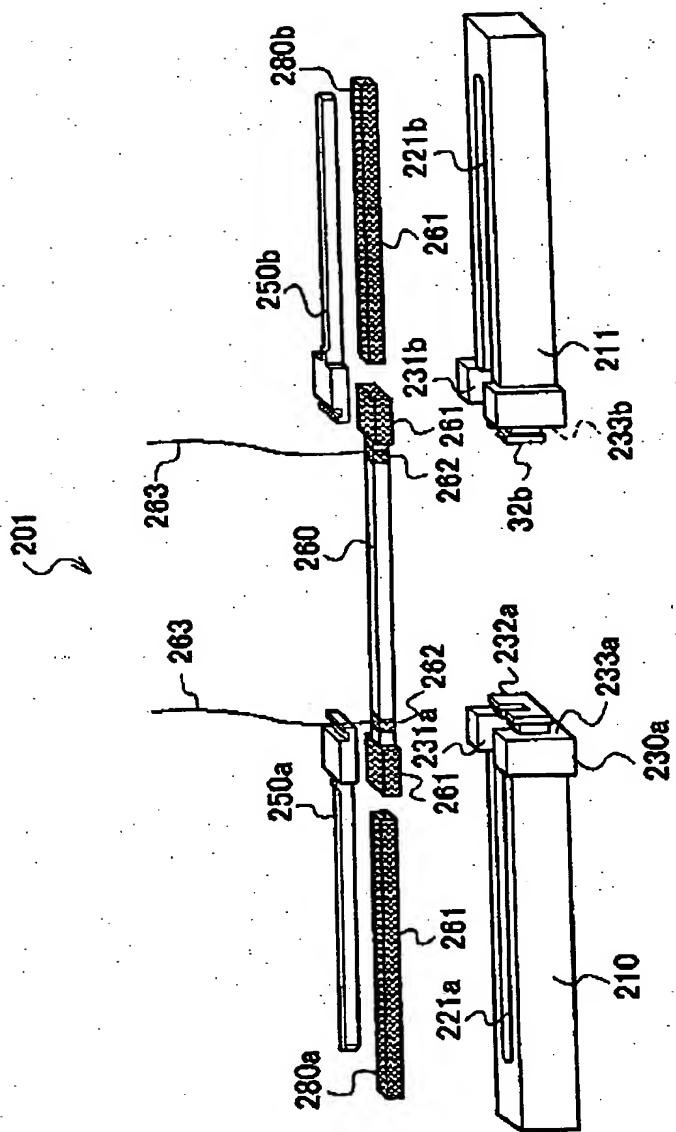


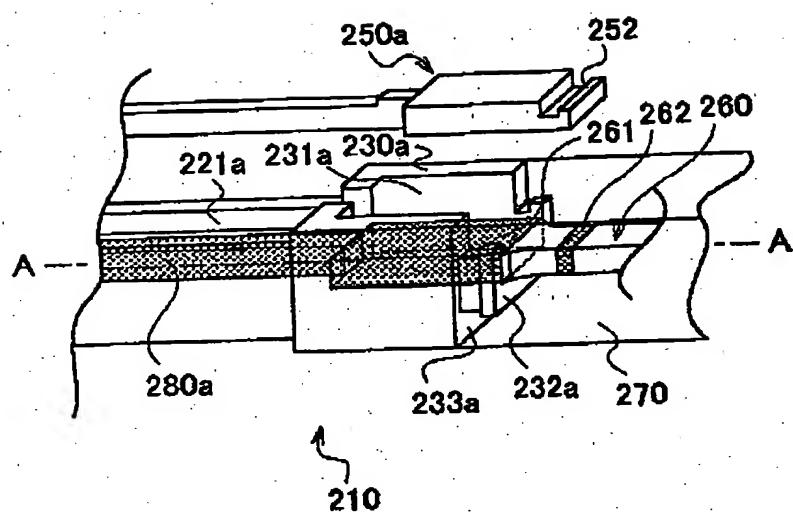
FIG.10



10/16

BEST AVAILABLE COPY

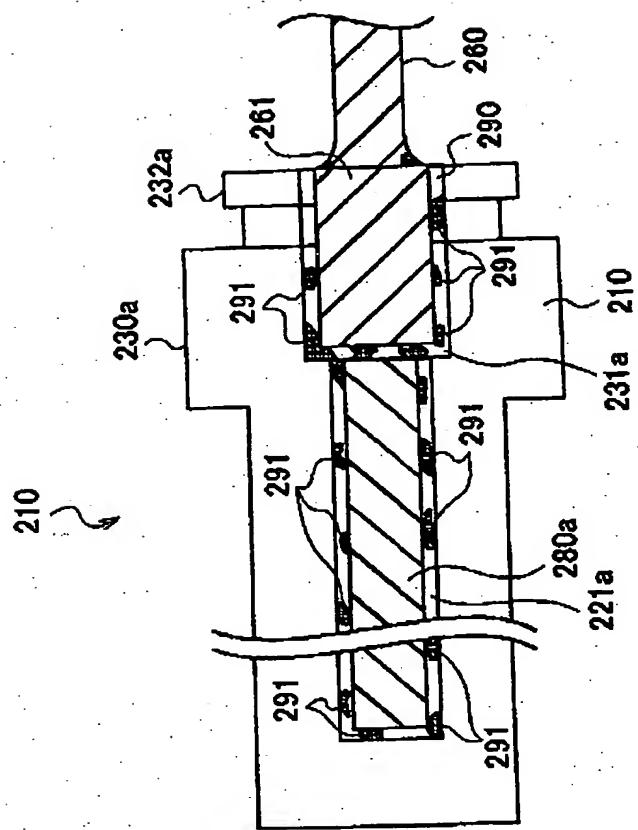
FIG.11



11/16

DEST AVAILABLE COPY

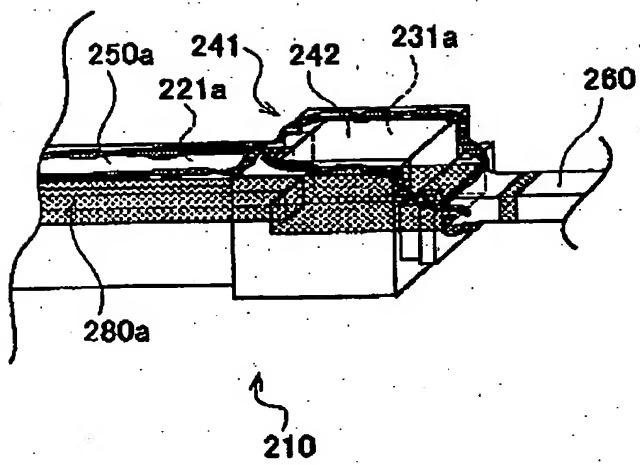
FIG.12



12/16

DECT AMM 0115 0071

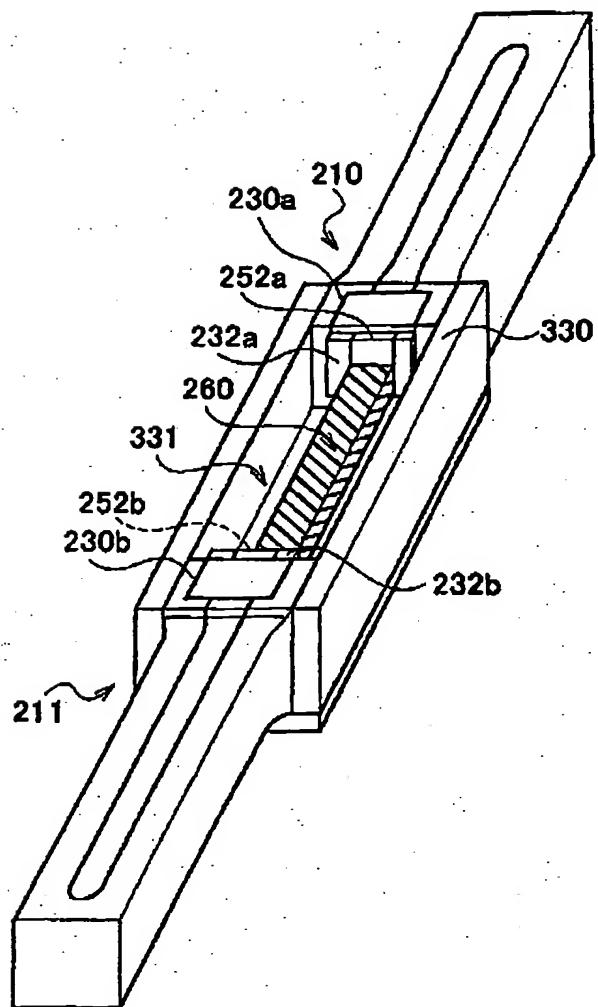
FIG.13



13/16

EXACT AS YOU SEE IT COPY

FIG.14



14/16

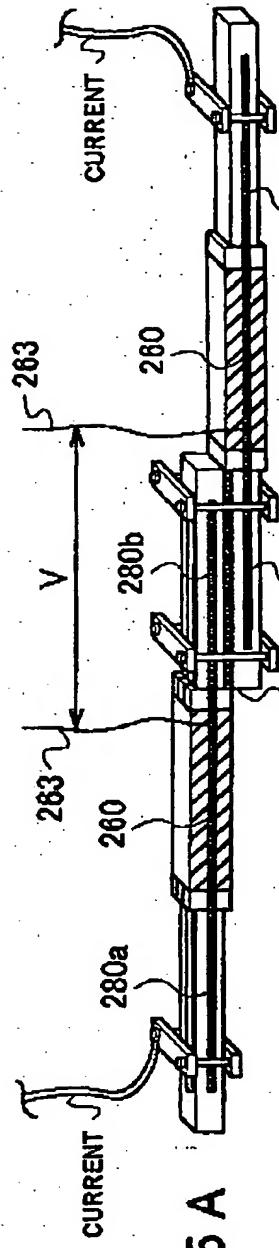


FIG. 15 A

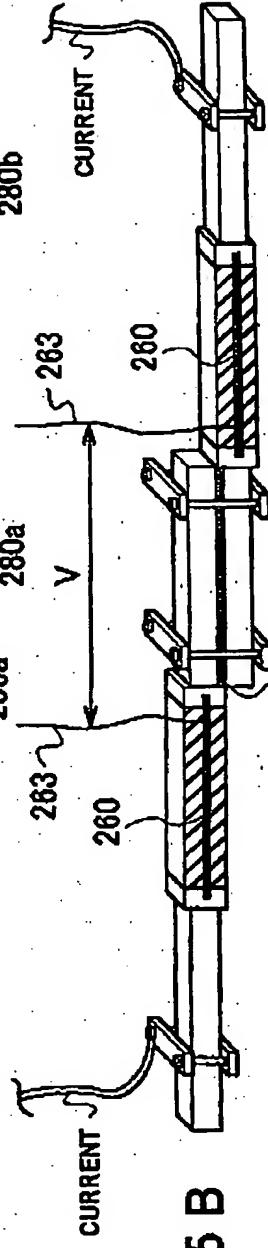


FIG. 15 B

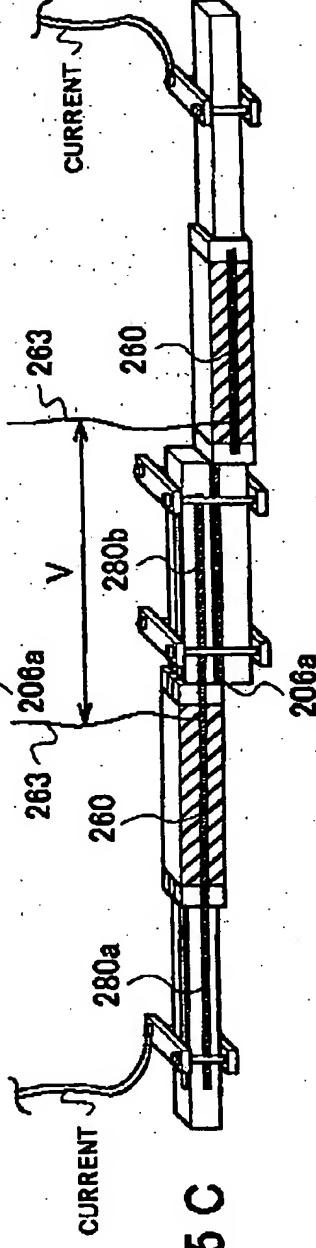


FIG. 15 C

FIG.16

| | TEMPERATURE 77 K RESISTANCE VALUE [$\mu\Omega$] | TEMPERATURE 4.2 K RESISTANCE VALUE [$\mu\Omega$] |
|---|---|--|
| OVERLAYING OF ELECTRODES WITH PLACEMENT OF SUPERCONDUCTOR | 0.28 | 0.2 |
| OVERLAYING OF ELECTRODES WITHOUT PLACEMENT OF SUPERCONDUCTOR | 3.23 | 2.6 |
| OVERLAYING OF ELECTRODE WITH PLACEMENT OF SUPERCONDUCTOR AND ELECTRODE WITHOUT IT | 1.52 | 1.22 |

FIG.17

| | TEMPERATURE 77 K RESISTANCE VALUE [$\mu\Omega$] | TEMPERATURE 4.2 K RESISTANCE VALUE [$\mu\Omega$] |
|---|---|--|
| OVERLAYING OF ELECTRODES WITH PLACEMENT OF SUPERCONDUCTOR | 0.27 | 0.21 |
| OVERLAYING OF ELECTRODES WITHOUT PLACEMENT OF SUPERCONDUCTOR | 3.5 | 2.65 |
| OVERLAYING OF ELECTRODE WITH PLACEMENT OF SUPERCONDUCTOR AND ELECTRODE WITHOUT IT | 1.68 | 1.29 |